NEW ENGLAND FARMER.

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ORIGINAL COMMUNICATIONS.

FOR THE NEW ENGLAND FARMER.

LEGHORN WHEAT, &c.

Mr EDITOR—If you think the following worthy a place in your valuable paper, you are at liberty to publish it.

In the 68th page, number nine, of the present volume of the New England Farmer is published the result of an experiment, by Mr SETH DAVIS, of Newton, on the Italian or Leghorn Wheat. He states that his object is, not to tell what he has done, but to learn how others have succeeded; and in compliance with his wish I have written the following.

Early in the spring of 1828, I procured at the New England Farmer Seed Store, a quart of Italian or Leghorn wheat, left there for distribution, said to be the kind which produced the straw from which the Leghorn bonnets are made. On the 26th of March (the weather being fine) after clearing the wheat from some foul seeds, I sowed it on about three rods of ground, a light, dry, sandy loam, pretty bountifully manured with dung from a stable, and well dug in with a spade. Part of it I sowed broad cast, and part in drills. Both came up, and grew very well. Thinking to try the experiment a little farther, I called at the New England Farmer Office, and received of Mr Russell four quarts more of the Italian wheat kept there for distribution. On the 16th of April, at the time I sowed my oats, I sowed about 20 rods of ground with the four quarts of wheat. The ground was a moist loam, situated in a valley, and not sufficiently dry to sow it before. The ground was planted with corn last year; the hills split and harrowed down this spring, ploughed twice, the furrows bushed down, the wheat and grass seed sowed, harrowed, and bushed in. I then raked over the ground to clear off the corn stubble and other rubbish. It came up well and grew, but did not look so promising as that sowed in March. About the last of June, at the time people cut and scald rye straw for braiding, I cut part of the wheat which I sowed in March, which was about four to four and a half feet high, and pretty stout strawed. Our folks scalded and prepared it as they usually do rye straw for braiding; but after preparing it as usual, they found it very thick, stiff and brittle, and of a bad color, and wholly unfit to braid into any kind of hat or bonnet. The remainder I left to ripen, which yielded a large full kernel, very white and free from smut. The other four quarts, sowed the 16th of April, although sowed on a deeper soil, had no comparison with that sowed in March. It was not so tall by about a third; the straw was small, the grain shriveled and blasted, and there was but little more than three pecks of wheat from the whole. Whether the difference in the quality of the two parcels of wheat was owing to the times of sowing, or to the difference in the soils, I cannot tell, but think it was partly to both, as the ground on which the last parcel was sowed, was probably too low and moist.

The grass seed, which I sowed with the above wheat was a pound of lucerne, which I procured at the New England Farmer Seed Store. It came up tolerably well, but grew poorly, dwindled away, and most of it died before winter. A few roots, however, survived the winter, but did not flourish this season, and were very slim and short. This is the second time I have been disappointed with this kind of grass, and conclude that my land does not suit it, or I do not know how to cultivate it. I also sowed English rye grass, with oats on a piece of moist loamy land, adjoining the above. It came up, spread, and looked very promising in the fall, but was all killed by the winter; there was not a root left alive last spring. If any of your correspondents will have the goodness to give some information, through the medium of your valuable paper, respecting the cultivation of said grass, they will oblige the writer of this article. But to return to the wheat.

In the spring of 1829, wishing to try the Italian wheat again, and having no land suitably prepared, I ploughed a strip of grass ground, nearly 40 square rods, on a side hill, a weak, gravelly soil. I spread on it a load of stable dung, and a load of manure from my hog stye. I harrowed it over, and sowed on it about a peck of wheat. After washing it, to clean it of foul seeds, I mixed it with air slacked lime, and dry sand, sowed it and harrowed it in. It came up tolerably well, but did not grow very rapidly. At harvest time, the straw and ear were very short and small, especially where the ground was not manured, but the kernel was pretty white and full. There was a little short of a bushel of wheat, when cleaned. It is probable that the birds wasted considerable, as they were very numerous on the field at the time of harvesting, and the field was not in sight of my house.

I also let one of my neighbors have a peck of my Italian wheat; he sowed it on a piece of ground, well adapted to grain, by the side of some of our native wheat. The ground for both kinds, being prepared and manured alike. In June, he told me he was sorry he had sown the Italian wheat, for it was far inferior to the native. He said it was not so tall, and did not look so well as his other wheat, and that he should lose his labor. But after the heat of summer came on it grew very rapidly, gained ground of his other wheat, and at harvest time was nearly a third taller than his native wheat, and much heavier grain.

L. E.

Remarks by the Editor.—In the New England Farmer, vol. i. page 212, are some directions for cultivating the Leghorn wheat, when straw for manufacturing purposes is the object of its culture, in a letter from Mr APPLETON, our Consul at Leghorn, to SAMUEL DANA, Esq. In these it is observed that, 'the grain which produces the straw worked into hats in Tuscany, is here called "Marjola," or March grain. It is sown in March, and arrives at its appropriate maturity, for the manufacturing of hats, from the twentieth to the thirtieth of June. It is sown on somewhat dry and elevated grounds, which should be broken three, four, or more days successively, to prepare it for planting the seed, where *four times as much seed as is usually planted of wheat intended for bread, should be planted on the same space of ground; for the thicker it is planted, the finer will be the straw.* It is here gathered while the *plant is in blossom*, which is in Tuscany, about the end of June. When it has risen to this state of maturity it is about eighteen inches high,' &c.

Mr Dana in the same article says, 'I should recommend to those who intend to cultivate this wheat, to have one field for the purpose of raising seed where the preparation of the ground should be like that which good cultivators of spring wheat use, and I am clearly of opinion that the earlier it is sown in spring the better will be the chance of a crop.

'Those who cultivate for the straw had better sow broad cast, and *eight times as thick as is usually sown for bread stuff*, the ground should be a light loam, *without any manure.* It is well known to all farmers that the thicker any grain or grass, flax or other plants are sown the finer will be the straw; and a gravelly knoll, such as we sometimes observe in a rye field, where there is a slender straw almost without heads, appears to be well adapted to produce fine straw, and where the field or patch of ground can be surrounded with other grain (so as not to have any outside rows,) the straw will be brighter and less liable to rust.'

FOR THE NEW ENGLAND FARMER.

A SKETCH OF VEGETABLE ANATOMY VEGETABLE ECONOMY, &c.

Continued from page 338.

Trees, shrubs, &c, like animals, have their youth, vigor, and old age. They are designed to flourish a certain time, then decay and perish. When the vital powers (inherent powers) are so far exhausted by age as not to produce leaves sufficient for the purpose designed, or when leaves have been produced, but are prevented by insects or otherwise from performing their functions, death is the consequence. Some trees, however, which are vigorous, having lost their leaves by insects before they had performed their office, by an effort of nature throw out leaves again the same year, and of course survive the shock. A new layer of albernum and a new liber seems necessary every year to the life of the tree, and these cannot be formed without leaves.

If the bark of an apple tree be carefully removed about the 20th of June, a soft pulpy matter will be found next the wood: this is undoubtedly the rudiments of a new liber, and perhaps of a new layer of wood; this substance, however, becomes the bark of the tree, which may receive little or no injury, if the operation be neatly done; but to every mark made in the pulpy matter, there will be a corresponding figure in the new bark.

When a plant of Indian corn is broken off below the insertion of the ear, and thus deprived of all nourishment from the earth, the grain, though small, will continue to increase in size for some time, and is the last thing to perish. In this case the leaves, &c, continue to perform their functions, although feebly, and the whole plant thus severed is made subservient to the growth and perfection of the grain.

The situation of leaves is various. *Radical leaves* are such as grow directly from the root, as

in the daisy. *Cauline*, spring from the stem, and *ramneal*, from the branches. These are alternate, opposite, scattered without order, or clustered. Several leaves standing round the stem or branch are called *verticillated* or whorled, and are three, four or more. *Decussate*, such as cross each other in pairs alternately, as in many plants with opposite leaves. *Imbricated*, lying over each other like tiles upon a roof. *Two-ranked*, spread in two directions, as in the hemlock. *Unilateral*, leaning to one side, like Solomon's seal. Some leaves are erect, others reflexed, but generally they spread more or less, horizontally. *Petiolate*, such as stand on a foot stalk. *Sessile*, spring from the root or branch without a foot stalk. *Peltate*, have the foot stalk inserted in the centre, as in the nasturtium. *Amplexicaul*, clasp the stem or branch with their base. *Decurrent*, run down the stem or branch in the form of a border. *Perfoliated* stem running through the leaf. *Connate*, united, at their base, as in the trumpet honeysuckle. *Vagimant*, sheathing the stem as in wheat and most grasses. *Equitant*, clasp each other in opposite rows, being compressed at the base, as in the iris.

The form of leaves is either simple, as in grasses, lilies, &c, or compound, as in elder, roses, &c. Simple leaves are either undivided, as in lilies, or lobed like the hollyhock, &c. Simple leaves are either, *orbicular*, round, very rare; *roundish*, more common; *ovate*, egg-shaped; *obovate*, same figure, broad and uppermost; *ellipticale*, broadest in the middle; *oblong*, several times longer than broad; *spatulate*, roundish figure, tapering into an oblong base; *lanceolate*, narrow, oblong, tapering towards each end, as in willows; *cuneiform*, wedge-shaped, broad end, tapering down to the base; *linear*, narrow parallel, sides like many grasses; *acerose*, needle-shaped, acute, rigid, evergreen, as in pine, juniper, &c; *deltoid*, trowel shaped, three angles the terminal, one the most acute; *rhomboid*, diamond-shaped, nearly square; *reniform*, kidney-shaped, as in the Canada snake root; *triangular*, having three angles; *quadrangular*, having four angles; *quinquangular*, five angles; *cordate*, heart shaped, very common; *lunate*, crescent shaped; *sagittate*, arrow shaped, triangular, posterior angles much elongated; *hastate*, triangular, hollowed out at the sides and base; *panduriform*, fiddle shaped, broad at the ends, contracted in the middle; *runcinate*, cut into several transverse, acute, reflexed segments, as in the dandelion; *lyrate*, cut into several transverse segments, gradually larger towards the end, which is dilated and rounded; *cloven*, when the fissures are linear or straight; *lobed*, segments rounded; *sinuated*, cut into rounded dilated openings, as in the oak; *parted*, deeply divided almost to the base; *laciniated*, cut into various irregular portions as if torn; *palmated*, hand-shaped, cut into several oblong segments, leaving an entire space at the base; *pinnatifid*, cut into several transverse, parallel segments; *bipinnatifid*, doubly pinnatified, cut into segments, and the segments cut again; *pectinate*, segments very narrow like the teeth of a comb; or *unequal* the two halves of the leaf are unequal, and their bases not parallel. Some leaves are *tubular*, as in the onion; others are *ensiform*, two-edged, tapering to a point, as in the iris, &c.

The termination of a leaf is either *truncated*, abrupt, as if the extremity were transversely cut off; *premorse*, jagged, having various irregular notches; *retuse*, ending with a broad hollow notch; *emarginate*, with a small acute notch; *obtuse*, ending in a segment of a circle; *acute*, terminating in an acute angle; *acuminate*, having a taper point; *blunt with a small point*; *mucronate*, tipped with a spine; or *cirrose*, tipped with a tendril.

The margin of a leaf is, generally, either entire, as in the lilac; *spinous*, beset with prickles, as in the thistle; *unarmed*, reverse to spinous; *cehowever*, fringed with soft hairs; *cartilaginous*, hard and horny; *dentated*, toothed; *serrated*, teeth like those of a saw, pointing forwards; *minutely serrated*, teeth very fine; *crenated*, teeth rounded, notched with little rounded scallops; *jagged*, irregularly notched; or *wavy*, bordered by small obtuse angles.

The plane or surface of a leaf is either *smooth*, naked, destitute of hairs, &c, rough, rugged; *varty*, small tubercles; *viscid*, covered with a glutinous substance; *bristly*, coarse and stiff hairs; *hairy*, fine short hairs; *downy*, fine soft substance; *shaggy*, long hairs; *hoary*, apparently frosted; *glaucous*, mealy; *striated*, marked with fine longitudinal lines; *furrowed*, lines deeper than the last; *spotted*, more or less; (the foregoing terms apply equally to stems and leaves; the following apply only to leaves) *wrinkled*, little inequalities; *blistery*, inequalities larger, as in the cabbage; *plaited*, folded up and down; *undulated*, waved obtusely up and down; *curled*, the border more expanded than the disk; *concave*, hollow in the middle; *convex*, reverse of the last; *veiny*, vessels prominent—forming a kind of net work; *ribbed*, simple lines extending from the base to the point; *triply-ribbed*, three ribbed, the lateral ribs branch off above the base; *base-triply-ribbed*, the base cut away close to the lateral ribs, as in burdock. Some leaves are fleshy, such as belong to those plants called succulent. Their internal pulp seems to have no share in their peculiar functions as leaves; but to retain moisture.

Compound leaves consist of two or more leaflets, foliola, small simple leaves having one common foot-stalk. They come, principally, under the following denominations.

Digitate, several leaflets standing on the summit of a common foot-stalk. Such are either *binate*, two; *ternate*, three; or *quinate*, five leaflets.

Jointed, one leaf, growing from the summit of another by a kind of joint.

Pinnate, composed of several leaflets ranged laterally on the foot stalk, as in the rose. When it has no terminal leaflet, it is called abruptly pinnate; sometimes a tendril takes the place of the odd leaflet, as in the pea. The leaflets are opposite or alternate, sometimes they are interrupted by an intermediate series of smaller ones.

Lyrata pinnate, much resembling a lyrate leaf, the terminal leaflet is much the largest, as in the turnip.

Auriculate, a simple leaf with a pair of auricles or leaflets at its base.

Pedate, has three primary leaflets of which the lateral ones are compounded.

Leaves are compound, in different degrees, as the case may be, as, simply compound; doubly compound; and thrice compound; of all which the umbelliferous tribe affords examples. Some leaves are twice and thrice binate or paired; some are twice and thrice ternate; and some are doubly and triply pinnate, spreading out in several directions.

APPENDAGES OF PLANTS.

There are various appendages to the herbage of plants.

1. *Stipula*, stipule. This is a leafy appendage to the true leaves, or their stalks, commonly in pairs, more or less constant in the same genus or species.

2. *Bractea*, bract—a leafy appendage to the flower, or its stalk, much diversified in different plants.

3. *Spina*, thorn, proceeds from the wood, as in the wild pear tree, which loses its thorns on cultivation.

4. *Aculeus*, a prickle, proceeds only from the bark, as in the rose.

5. *Cirrus*, clasper or tendril. Its use is to support weak stems and enable them to climb trees, &c. These organs are either simple or branched, straight at first, but soon become spiral and hard, and are thus capable of taking hold of anything that comes in their way. Some attach themselves by a dilatation of their extremities, to the smoothest and hardest substances.

6. *Glandulosa*, a gland, a small tumor, secreting a sweet, resinous, or fragrant liquor, as on the calyx of the moss rose.

7. *Pilus*, a hair or bristle, some on pressure discharge a poison, as in the nettle.

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MODES OF FLOWERING.

The modes of flowering are various.

1. *Verticillus*, a whorl. The flowers surround the stem in a ring or wreath, though perhaps they are only inserted on its two opposite sides, as in mint.

2. *Racemus*, a cluster or raceme. Several flowers each on its own stalk, loosely arranged along one common stalk, which may be simple or branched—generally drooping or pendulous, like a bunch of currants.

3. *Spica*, a spike—numerous crowded flowers ranged along an upright common stalk, expanding progressively, as in wheat. *Spicula*, spikelet, is a term used only for grasses, and expresses that assemblage of florets in a common calyx which constitutes their flowers.

4. *Corymbus*, corymb—a flat-topped spike, the long stalks of whose lowermost flowers raise themselves to a level, or nearly so, with the uppermost, as in the yarrow, cabbage, &c.

5. *Fasciculus*, a fascicle, a close bundle of flowers on small stalks variously connected and level at the top, as in the poetic pink.

6. *Capitulum*, a head or tuft, composed of numerous sessile flowers placed in a globular form, as in the globe amaranthus.

7. *Umbella*, an umbel consists of several small stalks spreading from one common centre, like an umbrella. Each stalk is either single flowered, or as commonly occurs, subdivided into small partial umbels, as in the carrot, parsley, &c.

8. *Cyma*, a cyme, consists of stalks springing from one common centre, but are afterwards irregularly subdivided, as in the elder, snowball, &c.

9. *Panicula*, a panicle, a loose subdivided bunch of flowers arranged without order, as in the oat. It is either close or spreading—sometimes it leans to one side.

10. *Thyrsus*, a thyrse, a dense bunch inclining to an oval form, as in the lilac.

[*To be continued next week.*]

Proceedings of the Massachusetts Horticultural Society—Continued.

Philadelphia, March 2, 1830.

Sir—I have the pleasure to send you a copy of the National Gazette, containing a letter addressed to the Horticultural Society of Pennsylvania, by a patriotic lady of New Jersey, on the destruction of fruit by insects, and proposing a premium for the discovery of a method to arrest the great and increasing evil. A subscription, in aid of the premium, will certainly be made in this city but I am not prepared to state the amount. In the meantime I will thank you to bring the subject before the Massachusetts Horticultural Society, and to favor the Pennsylvanic Society with their sentiments on it, as speedily as possible.

I am very respectfully,

JAMES MEASE.

Vice Pres. Hort. Soc. Pa.

Jacob Bigelow, Esq.

Cor. Sec. Mass. Hort. Society.

To the Friends of Horticulture in the United States.

A patriotic lady in New Jersey, to whom Horticulture is under great obligations, has addressed the following letter to a member of the Horticultural Society of Pennsylvania, for the purpose of being laid before it, on the insects which destroy the produce of some of our fruit trees, and proposes a large premium for the discovery of a remedy for this great and increasing evil. The Society, fully sensible of the important nature of the letter, appointed a committee to report thereon; to correspond with other Horticultural Societies on the subject; and to endeavor to procure all the information in their power in relation to the means of preserving fruits from the destroying enemy. With the last view, the Committee have thought proper to publish the letter, and will be pleased to receive communications on its contents from those who have it in their power to give useful information, or to contribute to the fund proposed to be raised, as a reward to the person who may be so fortunate as to discover the wished for means of saving to the country, the immense quantity of fine fruit, that is annually lost, by the depredations of insects.

As the writer of the letter wishes her name to be concealed, it is withheld; but it shall be communicated to those who wish to undertake the proposed task, and to avail themselves of the information respecting the nature and habits of the insects, which the writer, by close attention and long experience possesses.

Communications may be addressed to *David Landreth*, Jr, Chesnut street, Corresponding Secretary of the Pennsylvania Horticultural Society.

By order of the Committee,

Philadelphia, March 17. JAMES MEASE.

☞Publishers of newspapers throughout the United States, are requested to insert the above, and the following letter.

January 19, 1830.

Dear Sir—It is about thirty years since I first became aware of the fact, that certain kinds of fruit fell from the tree before they were ripe. Since that period, I have extended my observations, and I am quite convinced that although the severity of the winter may, and does sometimes injure the fruits, yet the chief cause of their frequent failures is the injury done to them by insects. I do not now allude to those which puncture the bark, either on the limbs or near the roots, nor to those which eat the leaves. They are of very little importance, mischievous as they are. It is of those which attack the fruit itself that I now speak, and to which I wish to draw your attention. There is scarcely a member of your society that can imagine the extent of the evil which these insects produce, for the markets are no criterion from which one might draw a proper conclusion. If these insects could be destroyed, there is every probability that unripe fruit, and such as is of an inferior quality would be entirely banished from our cities, thereby greatly lessening the bills of mortality. But for these insects, cherries, nectarines, plums and apricots could be sent to market for half a dollar a bushel, and of these, none but the finest kinds would be cultivated. As it is, these fruits are scarce and of high price, and as the insects generally choose the finest kinds for themselves, the markets are crowded with that which is poor and unripe. When we consider that fruit is no longer a luxury, but a necessary article of life, and that the heat of our summers renders it particularly grateful to all descriptions of persons, from infancy to old age, we ought to encourage every plan which has the cultivation of good fruit for its object. We must not judge that the evil of which I complain is of a local nature, because some few cultivators who live within the limits of a city, have been partially exempt from it. It is not from such small enclosures that a city is to be supplied with fruit; nor is it to those who have but few trees under their care that we must look for sympathy or hope for information. We must inquire of those who have planted large orchards, and who have, year after year, been careful to note the various accidents, diseases, and depredations which injure trees, and cause their fruit to perish. For myself, independently of several large orchards of apple, pear, and peach trees, I have upwards of twelve hundred full bearing plum, nectarine, and apricot trees, all of the rarest and most delicious kinds. The climate is favorable to their growth and fruitfulness, and my abilities and inclinations are adequate to their care, and to effect the object I had in view when I planted them;—this object was profit. Year after year, as these fine healthy trees began to show fruit, did I anticipate the reward of my labors, hoping that when in full bearing the quantity of fruit would be so great, as to insure me at least a certain portion of it.

This last summer, in June, (although the frost had entirely cut off my peaches,) there was every prospect of *each* plum, nectarine and apricot tree bearing at least *one* bushel of fruit. You will judge of my disappointment, when I tell you that from these twelve hundred trees I did not gather so much as a single plum!—*the insects destroyed them all.* Besides this loss, the apples, quinces, cherries and pears were so knotty from the punctures of the same insects, that they were unfit to eat. When we think of the loss to a city of twelve hundred bushels of such fine fruit, and from one farm only, we may imagine what it must lose when, but for these insects, twelve thousand bushels might be taken to market.

As it is, very few persons cultivate any other fruits than apples and peaches; and these often suffer very materially, in certain seasons, from this very cause. In fact, so numerous have insects become, that two thirds of the apples have been injured by them during the last summer, and many hundred bushels of peaches have been rendered unsaleable in consequence of the gummy exudations which disfigured them.

I have been for years employed, expensively, in attempts to destroy these insects, but have not yet been able to lessen their numbers. I have tried all manner of washes and fumigations, and have covered the orchards with as much of lime and ashes as the roots of the trees would bear; and what seemed to promise most success, I have caused every particle of fruit to be picked up as soon as it fell.

Thus disappointed, and believing that a remedy must exist somewhere, for these insects are neither poisonous nor invisible, I have thought it best to apply to the different Horticultural Societies for aid; and as you was kind enough to interest yourself in my representations, and promised to bring the subject before the Horticultural Society of Pennsylvania, I have made the first direct application to you, trusting that you will not only bring the matter properly before your own society, but that you will suggest the propriety of issuing circulars to all other Horticultural Societies in the United States.

The plan which I would propose, is to offer a *premium* for the destruction of these insects, and of such magnitude as to draw the attention of men of science to the trial. I think that a sum of two thousand dollars would not be too great when we consider that two years of experienced labor must be devoted to the investigation.

As to the mode of raising this sum, if nothing better is suggested to you, I would propose that it should be done by subscription. I would engage to obtain three hundred dollars myself—asking no more than one dollar from each subscriber.

As two years would elapse before the experiment could be considered as fully tested, there can be no doubt, but that double the amount of the sum I propose, could be obtained. The surplus of which after the premium has been paid, might be held by your society as premiums for the destruction of those other insects and vermin which destroy our grains and injure our vegetables.

To assist any one who is willing to make the trial, I am willing to give all the information I possess. And as by a laborious and long continued investigation, I have completely identified these insects, and know their habits, I can much facilitate the experiments of those who strive for the premium.

Although the name of the author of this interesting communication is withheld, there cannot remain a doubt as to the identity of the distinguished lady, who, by precept and example, has so conspicuously evinced her zealous disposition, to encourage and advance improvements in field and garden tillage.

New Jersey may claim the honor of possessing this eminent patron and cultivator of the science, and arts of rural economy, but we are all proud to acknowledge our obligations, and to do homage to that enlightened and beneficent matron whose enlarged and liberal views, embrace the great interests of the farmers and horticulturists throughout the republic. While in character, deportment, and intellectual attainments, she is an ornament to her sex, she independently performs the masculine duties of proprietor and director of a large and well managed estate. The widowed mother, may well emulate her virtues, industry and enterprise, and many a father receive instruction from her commendable example.

LIBRARY OF USEFUL KNOWLEDGE.

[*Continued from page* 341.]

CHAPTER IV.

THE DIFFERENT BREEDS OF ENGLISH HORSES.

THE IRISH HORSE.

In some of the rich grazing counties, as Meath and Roscommon, a large long blood horse is reared of considerable value, but he seldom has the elegance of the English horse; he is larger headed, more leggy, ragged hipped, angular, yet with great power in the quarters, much depth beneath the knee, stout and hardy, full of fire and courage, and the best leaper in the world.

The Irish horse is generally smaller than the English. He is stinted in his growth, for the poverty and custom of the country have imposed upon him much hard work, at a time when he is unfit for labor of any kind. For this reason, too, the Irish horse is deficient in speed. There is, however, another explanation of this. The Irish thorough-bred horse is not equal to the English. He is comparatively a weedy, leggy, worthless animal, and very little of him enters into the composition of the hunter or the hackney.

For *leaping* the Irish horse is unrivalled. It is not, however, the leaping of the English horse, striding as it were over a low fence, and stretched at his full length over a higher one; it is the proper *jump* of the deer, beautiful to look at, difficult to sit, and both in height and extent, unequaled by the English horse.

There are very few horses in the agricultural districts of Ireland exclusively devoted to draught. The minute division of the farms renders it impossible for them to be kept. The occupier even of a tolerable sized Irish farm, wants a horse that shall carry him to market, and draw his small car, and perform every kind of drudgery—a horse of all work; therefore the thorough draught horse, whether Leicestershire or Suffolk, is rarely found.

If we look to the commerce of Ireland, there are few stage wagons, or drays with immense cattle belonging to them, but almost everything is done by one horse carts. In the North of Ireland, some stout horses are employed in the carriage of linen, but the majority of the *garrons* used in agriculture or commercial pursuits are miserable and half starved animals. In the north it is somewhat better. There is a native breed in Ulster, hardy, and sure footed, but with little pretension to beauty or speed.

CHAPTER V.

THE ZOOLOGICAL CLASSIFICATION OF THE HORSE.

There are so many thousand species of living beings some so much resembling each other, and some so strangely and altogether different, that it would have been impossible to have arranged them in any order, or to have given any description that could be understood, had not naturalists agreed on certain peculiarities of form which should characterize certain classes, and other lesser peculiarities again subdividing these classes.

The first division of animals is into *vertebrated* and *invertebrated*.

Vertebrated animals are those which have a *cranium*, or bony cavity containing the brain, and a succession of the bones called the spine, and the divisions of it, *vertebræ*, proceeding from the cranium, and containing a prolongation of the brain, denominated the *spinal marrow*.

Invertebrated animals are those which have no vertebræ.

The horse then belongs to the *division vertebrated*, because he has a cranium or skull, and a spine or range of vertebræ proceeding from it.

The vertebrated animals, however, are very numerous. They include man quadrupeds of all kinds, birds, fishes, and many reptiles. We look out then for some subdivision, and a very simple line of distinction is soon presented. Some of these vertebrated animals have *mammæ* or teats, with which the females suckle their young. The human female has two, the mare has two, the cow four, the bitch ten or twelve, and the sow more than twelve.

This *class* of vertebrated animals, having mammæ or teats, is called *mammalia*, and the horse belongs to the division *vertebrata*, and the class *mammalia*.

The class mammalia is still exceedingly large, and we must again subdivide it. It is stated (Library of Entertaining Knowledge, vol. i. p. 13) that 'this class of quadrupeds, or mammiferous quadrupeds admits of a division into two *Tribes*.

'I. Those whose extremities are divided into fingers or toes, scientifically called *unguiculata*, from the Latin word for *nail*; and II., Those whose extremities are hoofed, scientifically called *ungulata*, from the Latin word for *hoof*.

'The extremities of the first are armed with claws or nails, which enable them to grasp, to climb, or to burrow. The extremities of the second tribe are employed merely to support and move the body.'

The extremities of the horse are covered with a hoof, by which the body is supported, and with which he cannot grasp any thing, and therefore he belongs to the *tribe ungulata*, or *hoofed*.

But there is a great variety of hoofed animals. The elephant, the rhinoceros, the hippopotamus, the swine, the horse, the sheep, the deer, any many others, are *ungulated* or *hoofed*; they admit, however, of an easy division. Some of them masticate or chew their food, and it is immediately received into the stomach and digested; but in others, the food, previous to digestion, undergoes a very singular process. It is returned to the mouth to be remasticated or chewed again. These are called *ruminantia*, or *ruminants*, from the food being returned from one of the stomachs (for they have four) called the *rumen* or paunch, to be chewed again.

The *ungulata* that do not ruminate are somewhat improperly called *pachydermata*, from the thickness of their skins. The horse does not ruminate, and therefore belongs to the *order pachydermata*.

The pachydermata who have only one toe belong to the *family solipeda—single-footed*. Therefore the horse ranks under the division vertebrata; the class mammalia;—the tribe ungulata;—the order pachydermata; and the family solipeda.

The solipeda consists of several *species*, as the horse, the ass, the mule, and the quagga.

First stands the EQUUS CABALLUS, or COMMON HORSE.

Animals are likewise distinguished according to the number, description, and situation of their teeth. The horse has 6 *incisors* or *cutting* teeth, in the front of each jaw; and one *canine* tooth or *tusk*.

On each side, above and below, and at same distance from the incisors, behind the canines and with some intervening space, are six *molar* teeth, or grinders; and these molar teeth have flat crowns with ridges of enamel, and that enamel penetrating into the substance of the tooth.

The whole is thus represented by natural historians, and the reader will comprehend our meaning when we are speaking of other animals.

	6	1—1	
Horse.—Incisors --,	Canines ——,		Total 40
	6	1—1	[teeth.

THE WHITE MULBERRY.

This tree is said to be worthy of attention on account of its beauty as a shade tree. A late writer speaking of this tree, says, 'it would add greatly to the beauty of our farms and villages, to have them interspersed with rows and groves of the white mulberry.' This alone is a sufficient reason for cultivating it—but when its use in rearing the silk worm, and the profit that may be realized from this business are considered, it seems to us an object of great consequence to the agriculurists and people of this state.

The seeds may be obtained in Boston, Mansfield, Connecticut, and various other places. In four years from the time of sowing, the tree, it is said, will be large enough to begin to feed the silk worms.

Some idea of the importance of the silk business, may be formed from the fact which appears from the records of the Treasury, that the importations of silk during the year which ended on the 30th of September, 1828, amounted to $8,463,563—of which $1,274,461 were exported; and that in the same year the exportation of bread stuffs from this country amounted only to $5,414,665—eaving a balance against us, by a comparison of these two articles, of about two millions of dollars. —*Greenfield Gaz.*

From the Charleston Gazette.

RICE FLOUR.

Some notice of the preparation of this article for domestic purposes, was made in the daily prints a week or more since. Through the polite and friendly attention of Colonel Vanderhorst, we have been favored, not only with a specimen of a very superior article prepared under his own direction, but with the proper manner of making use of it. We do not know that we can do a better service to our southern trade, than by giving these various modes of its preparation, in order to overcome a difficulty in the use of it, arising entirely from a general ignorance of the article in its present form. Our readers will observe that we do not arrogate to ourselves the framing of these valuable prescriptions. We never boiled rice in all our lives; though we have some little credit for ability in encountering it in a different way. But the ladies to whom we are specially indebted on more occasions than one, have graciously informed us where we have been in fault. For the making of *rice bread*, then, we are required to

Boil a pint of rice soft—add a pint of leaven, then three quarts of the flour—put it to rise in a tin or earthen vessel until it has risen sufficiently—divide it into three parts—then bake it as other bread, and you will have three large loaves.

*To make Journey or Jonny Cake.**—To three spoonfuls of soft boiled rice, add a small tea cup of water or milk; then add six spoonfuls of the flour, which will make a large Journey Cake or six waffles.

To make Rice Cakes.—Take a pint of soft boiled rice ; a half a pint of milk or water, to which add twelve spoonfuls of the flour; divide it into small cakes, and bake them in a brisk oven.

To make Wafers.—Take a pint of warm water, a tea spoonful of salt; add a pint of the flour, and it will give you two dozen wafers.

To make Rice Puffs.—To a pint of the flour add a tea spoonful of salt, a pint of boiling water; beat up four eggs; stir them well together; put from two to three spoonfuls of fat in a pan ; make it boiling hot, and drop a spoonful of the mixture into the fat as you do in making common fritters.

To make pap Pudding.—To a quart of milk add a pint of the flour; boil them to a pap; beat up six eggs, to which add six spoonfuls of Havana sugar and a spoonful of butter, which when well beaten together, add them to the milk and flour; grease the pan in which it is to be made, grate nutmeg over the mixture and bake it.

After all this is done, the sooner they are eaten the better.

*We have a strange notion that this should be neither Jonny nor Journey, but Jenny Cake. We have not the slightest question but that it was called so by some rustic lover, in compliment to his mistress, who possibly excelled in the art of preparing it. Let it then, in future, be called 'Jenny Cake,' and whoso (man) shall henceforth call it by any other (masculine) appellative, let him not partake of the delicacy.

From the Newburyport Herald,

A practical Agriculturist has handed us the following memorandum which we think worthy the attention of every person who has fruit trees:—

Canker Worms.—Perhaps it would be well for our agricultural friends who have faithfully tarred their fruit trees this season, to examine in and about the tar, where no doubt they will find thousands of canker worms just hatched, and by stirring the tar, eggs without number yet to hatch. Now if the worms thus hatched are capable of ascending the tree, we see at once that the object of tarring will in a great measure be defeated,—except the tar, worms and eggs are carefully removed from the trees and destroyed by fire or some other effectual mode.

RAIL ROADS AND CANALS.

The Baltimore American publishes an extract of a letter from Robert Benson, Esq. of Liverpool, addressed to Thomas Ellicott, Esq. of that city under date of Liverpool, 1st February, 1830, which contains a most satisfactory and interesting account of the late experiments on the Liverpool and Manchester Rail Road, and discusses the supposed relative advantages of the several recent improvements in locomotive engines and rail road cars. The writer is a director of the Liverpool and Manchester Rail Road Company. He says,

'I consider the question in relation to Canals as settled, and that where the proprietors cannot convert them into Rail roads, (which is under the serious consideration of some,) they will be worthless, no matter whether there be an abundant supply of water or not. Canals or river navigation, excepting under particular circumstances, such as tide ways, or in rivers like the Hudson, requiring no outlays to make them navigable, and where steam power can be used,—must be abandoned. Your country ought to witness the construction of no more Canals, and the best way will be to convert those which you have into railways. If the proprietors do not take the hints they will repent it.'

VINEYARDS.

It is among the strange things that in a climate that will produce good grapes, there are no vineyards. The grape, if cultivated solely for the fruit, will yet well repay the expense of cultivation. We recommend it to all persons who have half an acre of land, to appropriate a warm corner for a few vines. They will not only grow while he sleeps, but will present him when he awakes with a refreshing luxury.

TRIMMING GRAPE VINES.

Extract from an article, published in the American Farmer for March 12, 1830, by Thomas Gimbrede.

'Having observed that in this country the fall is always remarkably fine, I trim my vines as soon as the leaves are off, in so doing, I give a chance to that slow but constant vegetation, which is carried on with all its force to perfect the buds and wood which are left on the vines.

'*This principle of vegetation is very remarkable in our forests during the fall and winter.*

'The vine also presenting less surface to the storms, is much less injured. Finally, by an early trimming a considerable quantity of sap is generally raised to the surface of the cut, which fills up the pores of the wood, coagulates, and thereby nature *plasters them* to meet the severity of the winter or bleeding in the spring.'

PRESERVATION OF POTATOES.

Potatoes at the depth of one foot in the ground produce shoots near the end of the spring ; at the depth of two feet they are very short, and never come to the surface ; and between three and five feet they cease to vegetate. In consequence of observing these effects, several parcels of potatoes were buried in a garden at the depth of three feet and a half, and were not removed until after intervals of one and two years. They were then found without any appearance of germination and possessing their original freshness, firmness, goodness and taste.—*Ann. de la Soc. d'Agric.*

VEGETABLE ORIGIN OF SILK.

The parenchyma of the white mulberry is composed of a tissue of beautiful white fibres of silk, much resembling China silk, which would lead us to the inference that silk is a vegetable, not an animal product; that is to say, that the basis of the material, in its proximate form, is derived from the vegetable kingdom, though the spinning of its substance into a lengthened thread is entirely due to the mechanical functions of the silk worm. The silk tissue of the mulberry becomes very obvious by breaking some decayed twigs of two or three years growth.—*Gar. Mag.*

It is predicted that in the course of a few years one can hire at a cheap rate his locomotive vehicle which shall waft him across the country at the rate of 30 miles in the hour without inconvenience.

The editor of the American Farmer advises every owner of a horse to purchase the edition of Hind's Farriery, just published by Mr Grigg, edited by Thomas M. Smith, Veterinary Surgeon of Philadelphia.

In the last number of the American Farmer, there is an essay on the relative advantage, to farmers, of employing mules and horses. The essay is from the pen of Mr Hood, of Maryland, who presents his observations as the result of thirty years practical experience, and illustrates them by distinct and detailed estimates.

Early Cucumbers.—The Middleton (Conn.) Sentinel mentions, that the proprietor of the *Palestine Garden and Prospect House*, in that city, exhibited to the Editor, several fine Cucumbers, grown in his garden this spring—the largest of which was about six inches in length.

Importations of Corn.—On Thursday upwards of 15,000 bushels of corn arrived at Portland from southern ports in 7 different vessels. Importations during the week about 27,000 bushels. And during the month of April between 60 and 70,000 bushels.

NEW ENGLAND FARMER.

BOSTON, FRIDAY, MAY 21, 1830.

GRAPHIC ILLUSTRATIONS OF THE HORSE.

We have seen a curious book, just published by Carter & Hendee, Boston, entitled, *The Beauties and Defects in the Figure of the Horse, comparatively delineated in a series of Engravings.* From Pendleton's Lithographic Press.

In the introduction it is remarked that 'By a detailed series of graphic and descriptive illustrations, it is the intention of the author of this work, to show the good and bad points in that most noble and useful animal, the horse. The publication is also intended as a Book of Lessons for such young artists as are inclined to pursue the study of the horse in all the different points of his figure and action.'

'There is no animal whose countenance combines such correct and powerful expressions of character. The physiognomy of the Horse, therefore, illustrating the different passions to which he is subject, as well as the natural bias of his temper and disposition, is an important branch of study to gentlemen of the turf, and to young purchasers ; for it is generally considered that to timid riders and drivers, the temper of the beast is an object of more consequence that any slight bodily blemish.'

It may seem incredible, that certain qualities in horses, relating to their dispositions, passions, &c, should be capable of being indicated by the pencil of the artist. Yet in these portraits of the animal, we see, or seem to see, traits of good humor, spirit, sluggishness, rage, ferocity, sullenness, &c, so plainly depicted that the character of the creature seems to stare you in the face, and is as easily read as the alphabet. The limbs, bodies, attitudes, &c, &c, of different sorts of horses are represented. Here is a fair leg formed for speed, and perhaps action ; but not calculated for permanency ; then one which 'is formed to do much work, and last long at it.' Next, one which 'is good in substance, but rather round and too straight.' Item, 'a pair of legs well formed for strength and action.' 'A pair of legs, weak, badly formed and good for nothing, &c, Then come 'hind legs, quarters,' &c, succeeded by complete figures of the animals in different modes of action. Such

as 'The plain Spanking Trot;' the 'Running Trot;' 'The Canterer or Ladies' Horse;' The Gallop;' 'The Hunter's Gallop;' 'Leaping;' including 'The Bucking Leap' and 'The Fly Leap.'

We are not prepared to say that 'The proper study of mankind is'—the horse; but every person who wishes for a knowledge of what are technically called 'the points' of that noble animal will find, we believe, that this work will present great facilities to the desired acquisition.

INSECT ON ASH TREES.

Mr Fessenden—Although much has been said and written respecting the insects which injure our fruit and forest trees, I hear no mention of the insect, which I now send to you. I wish you, or some of your correspondents, to inform the public and me, through your useful paper, what will destroy them or check their depredations.

About the 1st of June 1828, near sunset, I noticed a white ash tree, of which there are twelve standing in front of my house, divested of its foliage. I examined it and found the trunk of the tree completely covered with them. On the 29th of May, 1829, I observed a few of the same insects, on the same tree on which they made their appearance the year before; and on the 1st of June, early in the morning, on eleven of the trees there was not a worm to be found, nor a green leaf to be seen; but the ground, fence, and everything around were covered with millions of the worms. Sickness has, till now, prevented me from applying to you sooner for information.

Respectfully yours, RUFUS MANN.

Wrentham, Mass. April 1830.

Remarks by the Editor.—Several insects of the sort alluded to, accompanied the above communication, and may be seen preserved in spirits, at the office of the New England Farmer. They are about half the size of the common caterpillar, which infests the apple tree, white, and destitute of hair. We shall submit them to the inspection of scientific cultivators, entomologists, &c, and any information we may be able to elicit respecting the kind, habits, and remedies against the insect, will be presented to our readers.

GOLDEN PIPPIN.

Thomas G. Fessenden, Esq. and Mr J. B. Russell.

Gentlemen—I think so highly of the Golden Pippin, and feel so desirous of doing away the impression that they will not keep through the fall, that I send a few of the last from my farm in this place. The trees can be traced back for near a century. Trees imported by my father about twentyfive years since, bear well at Byfield; the fruit I think larger and better than from my old trees; and last week I found the apples from the trees at Byfield perfectly sound and in a proper state for eating. I make no douht they will remain so quite into June. Try them this day, and tell me plainly how much too far prejudice carries me. Your obedient servant,

GORHAM PARSONS.

Brighton, May 18, 1830.

☞ We lost no time in putting the above mentioned apples to the test of taste, and our organs of gustation pronounced their eulogy. We are glad to find that such veteran varieties of fruit are so durable, and are capable of ministering to the salutary enjoyments of several successive generations of their cultivators and admirers. Such of our readers as wish to refer to the celebrated controversy between Judge Buel, Col. Pickering, and others, respecting the durability of particular varieties of fruits, including the Golden Pippin, will find it in the New England Farmer, Vol. IV. pages 253, 262, et seq.

EARLY VEGETABLES.

We have been presented by Captain Daniel Chandler of Lexington, with a basket of Asparagus and Cucumbers of excellent quality. The Asparagus was the Early Large Devonshire, (sold at Mr Russell's Seed Store;) one of the stems measured $4\frac{3}{4}$ inches in circumference.

Cars have commenced running on the Baltimore Rail Road, the distance of 13 miles. The Baltimore editors say the prospect was never better, for a successful completion of that great undertaking.

GRAPES—ASPARAGUS.

J. S. Skinner: *4th mo. 7th*, 1830.

The individual who takes the liberty to address thee at this time, is not a practical farmer, or a *finished* horticulturist. In regard to either, his pretensions are humble, yet humble as they are, he ventures to say, no individual in our state takes more pleasure in viewing the advancement of that great source of national wealth—agriculture; and that most pleasing of employments, gardening or horticulture. I have paid some attention to the cultivation of the grape, and have found from experience, that the coal dust, cinders, and scales of iron, or black oxide of iron, from the blacksmith's forge, when properly mixed with *fine garden mould*, to be *incomparably* the best manure for the grape that can be used. It is a well known fact, that grapes thrive best in volcanic districts; that led me to use the above as a dressing for the grape, and found it to exceed my most sanguine expectation. I am not aware, that the material in question, has been used by any except myself and a few of my friends in this county. I mentioned it to a most indefatigable and *correct botanist* and horticulturist, David Thomas, of Cayuga county, last winter—he spoke of it in high terms of commendation, although he had not used it. It had not occured to him. Before this will reach him, he probably will have made use of it. For asparagus, I have also made use of finely pulverized oyster shells, well incorporated with the earth, in which it is planted, or well dug in about the roots of old beds. Its effects are astonishing, especially on old beds—it in fact regenerates them. The asparagus is, as is well known, a marine plant. *Fresh* oyster shells partake largely of marine qualities. What could be more simple, or more natural, or better suited to the growth of marine plants? It is also well known, that disintegrated carbonate of lime, when mixed with a suitable proportion of vegetable mould, forms a soil, almost perpetually fertile, and that few or no plants, or vegetables with which we are acquainted, but are benefited by its admixture with the soil in which they are placed. As there are many persons turning their attention to the cultivation of the grape, especially in the neighborhood of Baltimore, and as I wish them all success, and abundant crops, I take the liberty to address an individual with whom I have not the personal good fortune to claim an acquaintance. May blessings attend thee, my friend, in thy laudable exertions to render agriculture both honorable and profitable.

Thy friend, J. W. SMITH, M. D.

Lockport, Niagara County, New York.

PRESERVATION OF BUTTER.

M. Thenard recommends the method used by the Tartars; which consists in infusing the butter in a warm bath, at a temperature of 190° Fahr., and retaining it quiescent in that state, until the caseous matter has settled, and the butter become clear; it is then to be decanted, passed through a cloth, and cooled in a mixture of salt and ice, or, at least, in spring water, without which it would crystallize, and not resist so well the action of air. Preserved in close vessels and cold places, it may be kept for six months as good as it was on the first day, especially if the upper part be excepted. If, when used, it be beaten up with one sixth of cheese, it will have all the appearance of fresh butter. The flavor of rancid butter may, according to M. Thenard, be removed almost entirely by similar melting and coolings.—*Quarterly Journal.*

Cement for Hard Stones, Porcelain, and Glass.

This cement is a natural product, which, without being abundant, is in sufficient quantities for all ordinary uses. The large snails which are found in gardens, and woods, and are sometimes used for food, have a vesicle at the extremities of their bodies, filled with a whitish substance, having a greasy and gelatinous appearance. If it be applied between two surfaces, whatever be their hardness or compactness, and the surfaces be brought together throughout, so strong an adhesion is ultimately occasioned, that if violent blows or thrusts be given to the substances, they frequently break elsewhere than at the junction. A flint about the size of a fish having been broken into two pieces, and rejoined by these means, being thrown with violence on the pavement, broke into fragments by fresh fractures crossing the former junction, but not going along with it. All that is necessary to give this cement its full power is to allow it time to dry.—*Ib.*

Process for preserving Milk, for any length of time.

This process, invented by a Russian chemist, named Kircoff, consists in evaporating new milk by a very gentle fire and very slowly, until it is reduced to a dry powder. This powder is to be kept in bottles carefully stopped. When it is to be employed, it is only necessary to dissolve the powder in a sufficient quantity of water. According to M. Kircoff, the milk does not by this process, lose any of its peculiar flavor.—*Ib.*

*Boxford Bonnets.**—Bonnets, of a fashionable air, and well adapted to the season, have recently been made, at Boxford, about 25 miles from this city, from rye straw. The first edition of them was carried to New York and sold to the most fashionable milliners, as English Bonnets of recent manufacture and importation, at an exorbitant price. The New York milliners furnished their Boston Correspondents with the new article, and many of them were sold in this city, at from 12 to 16 dollars. The new English straw bonnets commanded such prices, that the industrious Boxford manufacturers sent in large supplies of them; and they can now be purchased at from 3 to 4 dollars. *Palladium.*

* (*Alias* Dunstable Straws.)

The turnpike roads of England are above 20 thousand miles in length, and upwards of a million sterling is annually expended in their repair and maintenance.

Indian Corn in England.—Cobbett boasted a great deal of his crop of Indian corn; but late English publications state that almost all attempts to cultivate this kind of grain have been abortive; and that it seems to be proved that the climate of England is not fit for the growth of this vegetable.

Strawberries.—We received, says the Baltimore Patriot, on Saturday, a basket of fine strawberries from the garden of a friend at Richmond. They have also been gathered at Alexandria and Annapolis.

EXHIBITION OF FLOWERS, May 15, 1830.

MASSACHUSETTS HORTICULTURAL SOCIETY.

Thirty very beautiful varieties of Ranunculus Asiaticus, from Messrs Pratt.

A fine plant of Calcelaria Corimbosa, in full flower. from B. P. Hovey, Jr.

A fine specimen of the beautiful flowering Shrub Lonicera tartarica or Tartarian Honeysuckle; Lonicera Xylosteum or Fly Honeysuckle; and Iris Florentina, from Messrs Winships'; fine flowers of Narcissus and Kerria Japonica, from S. Downer.

Cypripedium Humile or Two Leaved Lady's Slipper, a beautiful native plant, from R. Howe.

Tulips Lycium and Coronella Emerus, from H. S. Waldo.

Papaver Bracteatum; Geranium Ignescins superb; G. Washingtonian; G. Rowenia; G. Prince Leopold; G. Macranthon; G. Involucratum; G. Maximum; G. Lattelobium; G. Pickiei; Primula Sinensis var. pink and white; Alisum Saxatille; Vestea Lyceoides; China Chrysanthemums, from D. Haggerston.

Tulips for premium were exhibited by the following gentlemen:

S. Downer, Messrs Pratt, P Hovey, Jr. A. Aspinwall, J. Breck, of Pepperell, C. Senior.

The Tulips exhibited for premium were according to the judgment of the committee, very superior flowers; it was also stated by several gentlemen present, who had seen tulip exhibitions in England, that they had never witnessed greater varieties of finer colors or better shaped flowers. The committee decided that A. Aspinwall had the best six flowers; also, that great praise was due Messrs Pratt for their successful mode of cultivating the Ranunculus Asiaticus; they were sorry there had been no competition for the premium, it being one of the most beautiful spring flowers that can be introduced into a garden.

ERRATUM.—In the list of New Members admitted at the last meeting of the Massachusetts Horticultural Society, the name of EDWARD S. RAND, Newburyport, was erroneously printed EDWARD J. RAND, in last week's New England Farmer.

Agricultural Implements.

For sale at the Agricultural Warehouse 52 North Market-street,

Pickering's improved Tree Brushes, for destroying Caterpillars; long and short handled brushes, for washing trees; Vegetable Brushes; Brushes for tarring trees; Horse Brushes, &c.

Willis' improved Brass, Copper, and Tin Syringes, for cleansing grape vines and preventing mildew, see N. England Farmer vol. 8, p. 5, a communication from William Prince, Esq.

Lactometers; a few well finished Lactometers, some with extra large size glasses.

Pruning Knives, Shears, &c.; Wakefield's Improved Pruning Shears, Fruit Shears, Garden, Grass, and Hedge Shears. Pruning Saws, Chissels, &c.

Pruning and Budding Knives; a few very superior Ivory handled Budding and Propagating Knives. may 21.

Roman.

This very elegant, full blooded horse, imported with a hope of improving the breed, will stand this season at the farm of Mr Stephen Williams, in Northborough, County of Worcester, where some of his stock may be seen.

Roman was purchased in England, of the Earl of Warwick, and his pedigree has been traced in the New Market Studbook from Childers, the swiftest horse that ever run over New Market course, through eight generations of the highest bred horses and mares in England, without a single cross of inferior blood. At 4 years old he won 5, and at 5 years old he won 4 prizes, and has since beat some of the fleetest horses in England, over the most celebrated courses.

His color a very bright bay—black legs, mane, and tail—walks and trots well—is very good tempered—high spirited—active—15 1-2 hands high, and is considered by judges as handsome and well formed a horse as can be found in the country.

Mares have been repeatedly sent to him from Maine, Rhode Island, and Connecticut, as well as from the remote counties in this State, and the neighboring towns, and his colts are handsome and command high prices.

Terms—$20 the season, to be paid before the mares are taken away.

Northborough, Mass. may 21, 1830.

Garden Beans.

For sale at the Seed Store connected with the New England Farmer, 52, North Market Street,

A large variety of the most esteemed Garden Beans cultivated in this country, comprising the following sorts:

Pole or Running—Large Lima, Small Lima, *very fine*, Case Knife, White, Red, Speckled, and Yellow Cranberry, White and Scarlet Dutch Runners.

Dwarf—Early Mohawk, Early Six Weeks, Early China, Early Canada, Large White Kidney, Early Case Knife, Cream Colored Red Cranberry, Rob Roy, Warrington or Marrow, Quaker, Refugee, or Thousand to one, &c.

Cow Cabbage, or Cesærian Kail.

For sale at the Seed Store connected with the New England Farmer, 52, North Market-street.

A small quantity of this new vegetable, recently introduced from Europe. A particular account of it, will be found in recent numbers of the New England Farmer, and in Doct. THACHER's letter in last week's paper.

Millet, Buckwheat, Flax Seed, &c.

For sale at the Seed Store connected with the New England Farmer, 52, North Market-street.

A few bushels of Millet, *(of superior quality)* also, Buckwheat, Flax Seed, Sugar Beet, Mangel Wurtzel, Ruta Baga, English Norfolk Field Turnip, Yellow Aberdeen Field Turnip, Orchard Grass, fine varieties of Seed Potatoes, Seed Corn, &c.

Improved Durham Short-Horned Cattle.

Mr Powel's stock of high bred Short Horns, consisting of sixty males and females, either imported or bred by him will be offered for sale at Powelton, near Philadelphia, on Wednesday, the 10th day of June, at 10 o' clock. These animals have never been offered for sale, nor would they be sold if the owner were not about to leave America for some time.

1J16 WILLIAM HUGHS.

French Grapes.

An assortment of prime FRENCH GRAPE VINE ROOTS in good order for planting—for sale low, at 65, Broad-street, by E. COPELAND, Jr.

DUPONT'S POWDER for sale as above as usual, at wholesale and retail.

Also, the best of PERCUSSION CAPS, SHOT, BALLS, FLINTS, &c. Warranted Sporting Powder at 3*s.* and 4*s.* 6*d.* per lb.—at retail.

Dahlia Roots, &c.

For sale at the Seed Store connected with the New England Farmer, 52, North Market-street.

A good assortment of *Double* Dahlia Roots, with the colors marked on each, at the low price of 50 cents each. Also, Jacobean Lilies, at 25 cents—and Double Tube Roses at 25 cents each. may 7.

Early Tuscarora Corn,

For sale at the Seed Store connected with the New England Farmer, 52, North Market-street,

A small quantity of the early Tuscarora Corn, one of the finest sorts for garden culture for boiling—tolerably early, of good size, and good eating qualities, as it keeps in milk a long time—being equal in flavor to the common sweet Corn, and a month earlier.

ALSO—Several varieties of Field corn, the White and Yellow Flint, Gilman, Sioux, &c, by the hundred ears, or single. May 7.

Powder at 2s per lb.

DUPONT'S POWDER, quality warranted, for sale at *Copeland's Ammunition Store*, 65 Broad st, at *retail*. Also SHOT, CAPS, &c. of the *best quality*—each cap for cash.

Glass, Cheap.

40 Boxes 6 by 7 Window Glass, suitable for Green Houses or Hot-beds, with an extensive assortment of all other sizes, for sale by Loring & Kupfer, No. 10, Merchants' Row. 3m March 12.

Wilmot's Superb Strawberry.

For sale at the Seed Store connected with the New England Farmer, 52 North Market-street,

Several roots of Wilmot's Superb Strawberry, in pots, one thrifty plant to a pot—price 12½ cts.—also a few pots with4 plants to each, in fine order, most of them being in flower, and many with the fruit set, 37½. May 7.

PRICES OF COUNTRY PRODUCE.

			FROM	TO
APPLES, best,		barrel.	2 25	3 00
ASHES, pot. first sort,		ton.	102 00	108 00
Pearl, first sort,		"	120 00	130 00
BEANS, white,		bushel.	87	1 12
BEEF, mess,		barrel.		9 00
Cargo, No. 1,		"	7 25	7 50
Cargo, No. 2,		"	6 25	6 50
BUTTER, inspected. No. 1, new,		pound.	10	13
CHEESE, new milk,		"	6	8
Skimmed milk,		"	2	3
FLOUR, Baltimore, Howard-street,		barrel.	5 12	5 25
Genesee,		"	5 12	5 25
Rye, best,		"	3 62	3 87
GRAIN, Corn,		bushel.	53	55
Rye,		"	65	67
Barley,		"		67
Oats,		"	35	40
HOG'S LARD, first sort, new,		cwt.	7 00	8 00
HOPS, 1st quality.		"	14	15
LIME,		cask.	85	90
PLAISTER PARIS retails at		ton.	3 75	4 00
PORK, clear,		barrel.	16 00	17 00
Navy, mess,		"	12 25	12 75
Cargo, No. 1,		"		12 50
SEEDS, Herd's Grass,		bushel.	1 75	
Orchard Grass,		"		3 00
Fowl Meadow,		"		4 00
Tall Meadow Oats' Grass,		"		3 00
Red Top *(northern,)*		"	62	75
Lucerne,		pound.	38	50
White Honeysuckle Clover,		"		33
Red Clover, (northern)		"	7	8
French Sugar Beet,		"		1 50
WOOL, Merino, full blood, washed,		"	45	60
Merino, full blood, unwashed,		"	25	40
Merino, three fourths washed,		"	37	45
Merino, half blood,		"	35	33
Merino, quarter washed,		"	30	33
Native, washed,		"	30	33
Pulled, Lamb's, first sort,		"	40	45
Pulled, Lamb's, second sort,		"	30	35
Pulled, " spinning, first sort,		"	33	35

PROVISION MARKET.

CORRECTED EVERY WEEK BY MR HAYWARD,

(Clerk of Faneuil-hall Market.)

BEEF, best pieces,	pound	8	10
PORK, fresh, best pieces,	"	8	10
whole hogs,	"	5	9
VEAL,	"	3	7
MUTTON	"	4	12
POULTRY,	"	10	10
BUTTER, keg and tub,	"	12	14
Lump, best,	"	17	20
EGGS,	dozen.	10	11
MEAL, Rye, retail,	bushel.		85
Indian, retail,	"		80
POTATOES,	"	20	25
CIDER, [according to quality.]	barrel.	3 50	4 00

BRIGHTON MARKET—*Monday, May 17.*

(Reported for the Chronicle and Patriot)

At Market this day 239 Beef Cattle, (including 7 unsold last week) more thin Cattle were in than is usual at this season, (unsold 19) 12 Working Oxen, 2 Cows and Calves, 84 Sheep, and 220 Swine.

Prices.—*Beef Cattle.*—a small depreciation will be perceived (say 17c per 100 lbs.) probably in consequence of the weather being rainy, viz. extra $5,17 a 5,33, good 4,87½ 5,12½. thinner at 4,25 a 4,75.

Working Oxen—ordinary at $35, 36, 40, the pair.

Cows and Calves—at $25, 27.

Sheep—one lot of 9 *Cosset Weathers* were sold by Mr Rice of Conway, to Mr Blanchard of Marblehead, for $60, one lot of 45 were taken at two prices, 3,75 and 4,17.

Swine—a small advance; few sales only were effected at retail, at 6 a 6½ cents; one lot of 100 were taken at five cents; about 100 remain unsold.

MISCELLANIES.

ORIGINAL ANECDOTE.

In a certain town, there lived an odd sort of a Jonathan, who at the period of our story, had just attained the age when it became necessary that he should perform military duty. Accordingly he was directed to join one of the train bands, a circumstance that aroused the terrors of his imagination to their highest pitch, for he had never mustered sufficient courage to fire a musket. In vain did his tender and affectionate mother beseech him to practise the art of gunnery, (on a small scale,) 'he could not bring his resolution to the sticking place.' He often attempted to pull the trigger, but by some strange forebodings, his heart failed him. At length the dreadful day arrived, and Jonathan, armed cap-a-pie, with his 'bright and burning arms,' sallied forth, sought the field, and 'proudly glittered on parade.' Each soldier was provided with nine blank cartridges for the purpose of firing nine rounds. When the word was given his comrades loaded, and so did Jonathan; they fired, but our hero was too much alarmed by the flash of his neighbors' guns to think of pulling trigger; they reloaded and so did Jonathan, until the end of the 9th chapter, without having once fired his piece, for courage, like that of Bob Acres, kept continually 'oozing out at his fingers' ends.' The parade over, Jonathan trudged home, with nine cartridges in his musket, well rammed down. On his arrival his fond mamma anxiously inquired of him whether he had fired his gun. On his replying in the negative, she pronounced him a vile coward, seized the fatal piece, and elevated it to her right shoulder, while Jonathan skulked behind the door. A pause ensued; it seemed 'like a pause in nature,'—at length the trigger is pulled—the piece explodes, and is shattered into a thousand atoms, while the force of the concussion threw the terrified lady into the fireplace. Her hopeful son, as soon as he had got the better of his amazement, peeped from behind the door, and exclaimed, 'Mother! mother! don't git up yet, for there 's eight more on 'em to come sartin.'—*Richmond Repub.*

HABITS OF SHEEP.

Ludicrous Anecdote.—Dr Anderson relates the subjoined anecdote, which shows how perseveringly these animals will *follow their leader*, and presents an amusing fact in illustration of natural history.

A butcher's boy was driving about twenty fat wethers through the town of Liverpool, but they ran down a street along which he did not want them to go. He observed a scavenger at work with his broom a little way before them, and called loudly for him to stop the sheep. The man accordingly did what he could to turn them back, running from side to side, always opposing himself to their passage, and brandishing his broom with great dexterity; but the sheep much agitated pressed forward, and at last one of them came right up to the man, who fearing it was about to jump over his head, whilst he was stooping, grasped the broomstick in both hands, and held it over his head. He stood for a few seconds in this position, when the sheep made a spring and jumped fairly over him, without touching the broom. The first had no sooner cleared this impediment than another followed, and another, in so quick succession, that the man, perfectly confounded, seemed to lose all recollection, and stood in the same attitude till the whole had jumped over him; not one of them attempted to pass on either side, though the street was quite clear.

Blumenbach asserts the absolute blindness of instinct; in short, instinct in all its usual senses. Birds of passage kept in cages, with plenty of food, and in warm chambers, yet at the given season of migration manifest the greatest restlessness, and attempt to escape. Canary birds, having the materials given them, build exactly like the wild ones in the Canary Islands, although reared under other birds. Cordillac wished with Darwin, to take away all the wonderful from the constructiveness of birds, and refer it, as men, to practice. Nonsense! There are creatures, the silkworm, for instance, which work once, and but once, and which could have had no instruction.—*American Farmer.*

Popular Distinction.—In 1791, Horne went to take possession of his Episcopal palace at Norwich. When on the steps, he looked round and said, 'Bless us! what a multitude of people!' Some one near, not out of malice, but because his head was filled with Norfolk dumpling, said, 'Oh! my lord, this is nothing to the crowd on Friday last to see the man hanged!'

Thumping won't make a Gentleman.—Two eminent members of the Irish bar, Messrs Doyle and Yelverton, quarreled some years ago so violently that from words, they came to blows. Doyle, the more powerful man (at the fists at least,) knocked down his adversary twice, exclaiming with vehemence, 'you scoundrel, I 'll make you behave yourself like a gentleman.' To which Yelverton, rising, answered with equal indignation, 'No, sir, never; I defy you; you can't do it!'

The Citizen talks of a carrot, three feet and six inches in length, and two feet in circumference, raised in Camden, New Jersey. The Free Press, by way of offset, talks of a parsnip which measured five feet four inches, and which was as large in circumference as parsnips *usually* are when raised in good soil.

GOMBO.

Recipe.—Take an equal quantity of young tender okra, chopped fine, and ripe tomatoes skinned, and add an onion shredded small, and some pepper and salt. Put all in a stew pan, without water, and stew for an hour. This is a favorite West India dish.—*Am. Farmer.*

Dr Herbermont, of Columbia, N. C. intends to plant, this season, forty thousand vines, and to make four thousand grafts. This wine is like that of Madeira, called 'Juice of the Grape.' He sells it at 2 dollars the gallon, and calculates on 300 gallons the acre.

A manufacturer of sugar from beet root at Telloy Pas de Calais, has discovered a most economical process for refining that article. At the trifling expense of 1 sous, 50 pounds weight, of sugar may with very little more labor than by the common method, be obtained, much richer in crystals, free from all disagreeable smell, and of unequalled whiteness.

During the late cruise of the Peacock, in the Gulf of Mexico, a sailor was blown from the top gallant-mast-royal-yard into the sea, 150 feet. He was picked up with much difficulty, but had sustained no serious injury.

Beet Sugar.—A Boulonnais date of March 4th, says,—'When Napoleon first manifested the intention of causing sugar to be extracted from beet root, the proposal was deemed visionary; yet by far the greatest part of the finest sugars consumed in France at the present day, are the produce of that root. The supply from the colonies will not therefore be deemed absolutely necessary. The town of Boulogne has just established two "indigenous" sugar manufactories, which are in full work. The article manufactured in them is of the choicest quality.'

Canal Business.—The business of the canal is uncommonly brisk, and its effect upon the city is very apparent. We regret to learn that the canal in some places appears to be in a very neglected and ruinous condition. When it is considered that the annual expenditures by our canal commissioners for repairs, superintendents, &c, are over $300,000, it must seem abundantly sufficient to maintain every thing as it should be.—*Alb. Dai. Adv.*

The following lines, are worthy a place in every *bar-room*; they ought to be inculcated in the first lessons of childhood.

SWEAR NOT AT ALL.

It chills my blood to hear the blest Supreme,
Rudely appealed to, on each trifling theme;
Maintain your rank, vulgarity despise;
To swear is neither brave, polite, nor wise.
You would not swear upon a bed of death;
Reflect! your Maker now can stop your breath.

DAVID GRIFFITH, *Seedsman,*

MIDDLE-STREET, PORTLAND,

Would inform the public, that he is now ready to attend to the business of packing up Forest Trees, in crates or matted of any size they may direct, and on the shortest notice, for any part of the United States; the best attention paid to the packing and having the roots well covered.

ALSO, Forest seeds of almost any description, as they may ripen through the season.

*** Catalogues containing the variety of seeds and trees can be obtained of the subscriber, or J. B. RUSSELL, at the New England Farmer Seed Store, 52 North Market-street, Boston. 4t April 23.

Cabbage, Cauliflower and Broccoli Plants.

For sale at the Seed Store connected with the New England Farmer Office, 52 North Market street,

Vigorous Plants of the Early York and Early Savoy Cabbages, at 12 1-2 cents per doz; also Early Cauliflowers, and Large Purple Cape Broccoli Plants, at 25 cents per doz. in prime order for transplanting.—Also Sea Kale roots.

Sportsman.

This full blooded horse will stand the ensuing season at Worcester, Shrewsbury, and Westborough, and one day in the week (by particular desire) at Taft's in Brighton. Sportsman is now in this City, and may be seen at R. Davis' Stable, Back-St. tf Feb 19.

Fales' Hoes.

French & Emmons, No. 31, South Market-St. have just received a supply of J. & A. Fales' Patent Hoes.—Fire Brick and Slabs for furnaces constantly for sale.
April 2. 2m

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